

# What Statutes Frequently Impact Corps Projects?

In environmental laws and regulations, the terms hazardous waste, hazardous material, and hazardous substance are frequently used and are often misunderstood. Therefore, before discussing the environmental statutes that you as a commander should be aware of, a brief discussion of terminology is in order.

## What is a Hazardous Waste?

Hazardous waste is an EPA term used to describe wastes regulated under the Resource Conservation and Recovery Act. Hazardous wastes are categorized as either "characteristic" or "listed" waste and are defined in 40 CFR 261.

RCRA regulations contain specific definitions for waste exhibiting the characteristic of:

- ! ignitability,
- ! corrosivity,
- ! reactivity, or
- ! toxicity.

Additionally, RCRA regulations contain lists of waste which EPA has predetermined as hazardous wastes. These fall into four categories:

- ! wastes from specific sources (F listed waste);
- ! wastes from non-specific sources (K listed waste);
- ! toxic wastes from discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (U listed waste); and
- ! acutely toxic wastes from discarded commercial chemical products, off-specification species, container residues, and spill residues thereof (P listed waste).

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## **What is a Hazardous Substance?**

Hazardous substance is an EPA term used to describe substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act. The list of hazardous substances is found in 40 CFR 302. The definition of hazardous substance specifically excludes petroleum products, but includes all RCRA hazardous wastes.

## **What is a Hazardous Material?**

Hazardous material is a Department of Transportation term used to describe materials regulated under the Hazardous Materials Transportation Act (HMTA). Materials designated as hazardous for the purpose of transportation are listed in 49 CFR 172. This list of hazardous materials includes hazardous substances, hazardous wastes, and petroleum products.

## **The Resource Conservation and Recovery Act / Hazardous and Solid Waste Amendments (RCRA/HSWA)**

RCRA was enacted in 1976 and amended in 1984 by HSWA. Though it also addresses the management of non-hazardous waste, its primary impact on the Corps is in the management of hazardous waste and underground storage tanks. RCRA impacts the management of wastes from Corps laboratories; wastes generated by maintenance activities; and wastes generated during field investigations; design remediations; corrective action requirements; and treatment requirements.

As a division/district commander, you should be aware that hazardous waste regulations specify:

- ! the way in which hazardous wastes are characterized;
- ! the requirements for obtaining EPA identification numbers;
- ! packaging, labeling, and marking requirements;
- ! storage restrictions;
- ! inspection requirements;
- ! training requirements;
- ! manifesting requirements;
- ! Recordkeeping and reporting requirements;
- ! permitting requirements;
- ! treatability study restrictions;
- ! waste analysis requirements;
- ! contingency planning requirements;
- ! closure requirements;
- ! standards for hazardous waste burned for energy recovery;
- ! transportation requirements;
- ! land disposal restrictions and treatment standards;
- ! RCRA waste management unit design criteria.

You should also know that RCRA Underground Storage Tank (UST) regulations apply to storage of "regulated substances" defined as:

- ! petroleum and petroleum-based substances and
- ! hazardous substances as defined by CERCLA but excluding hazardous wastes.

These UST regulations specify:

- ! performance criteria for new underground storage tanks,
- ! general operating requirements,
- ! leak detection requirements,
- ! reporting and recordkeeping requirements,
- ! investigation requirements, and
- ! closure requirements.

### **Toxic Substances Control Act (TSCA)**

Whereas RCRA controls the disposal of hazardous wastes after they have been generated, TSCA was enacted in 1976 to evaluate toxic substances before they are used and to control the manner in which they are used. TSCA's primary impact on the Corps is in the management of polychlorinated biphenyl (PCB) wastes. EPA has developed specific regulations for the manufacturing, distribution, processing, storage, and disposal of PCBs because they are considered toxic, persistent, and bioaccumulative. The Corps not only is involved in remediating sites contaminated by PCB, but also owns facilities with active PCB electrical equipment.

As a division/district commander you should be aware that TSCA regulations specify:

- ! marking requirements for PCB equipment,
- ! inspection requirements to identify PCB leaks,
- ! special handling requirements for storage and disposal of PCBs,
- ! decontamination requirements for PCB spills,
- ! manifesting requirements,
- ! prohibitions on PCBs in fuel oil used for energy recovery,
- ! prohibitions on use or storage of PCB transformers in areas that may contaminate food or feed,
- ! requirements for registering PCB transformers with commercial building owners in or near PCB transformers,
- ! prohibitions on use of certain types of PCB transformers in or near commercial buildings,
- ! requirements for registering PCB transformers with fire response personnel with primary jurisdiction, and
- ! prohibitions on installation of PCB transformers except in emergency situations.

**Comprehensive Environmental Response  
Compensation and Liabilities Act (CERCLA)  
Superfund Amendments and Reauthorization Act  
(SARA)**

CERCLA was enacted in 1980 and amended by the SARA in 1986. It impacts the Corps in a number of ways. It is the foundation of the Superfund program in which the Corps is tasked to support EPA in executing, it is the basis for reporting releases of hazardous substances and oil spills from Corps facilities, and it is the basis of the Defense Environmental Restoration Program at active DOD facilities and formerly used defense sites.

As a division/district commander, you should be aware that CERCLA requires:

- ! the National Response Center to be notified immediately when a reportable quantity of a hazardous substance is released into the environment and there are criminal and civil penalties for failure to report;
- ! Federal facilities with reported releases to be placed on the Federal Facilities Docket;
- ! preliminary assessments to be initiated at sites listed on the Federal Facilities Docket;
- ! ranking of contaminated sites by EPA and establishment of a National Priorities List (NPL);
- ! a systematic approach to investigating and remediating sites in accordance with the National Contingency Plan;
- ! the Department of Defense to act as "lead agency" at non-NPL DOD sites;
- ! the Environmental Protection Agency to act as "lead agency" at NPL sites;
- ! potentially responsible parties (PRPs) to be liable for costs of remediating contaminated sites;
- ! facilities to comply with substantive requirements of state and Federal regulations but permit requirements are waived for activities conducted entirely on-site;
- ! whenever possible and practical, the establishment of a technical review committee to review planned actions which includes members of the Federal, state, and local government as well as the public;
- ! community involvement in the CERCLA process by conducting interviews with the local officials and the public, preparing formal community relations plans, and establishing information repositories; and
- ! the selected remedial action to attain all applicable or relevant and appropriate requirements identified by lead and support agencies unless specifically waived.

The process for responding to releases of hazardous substances under CERCLA is specified in the National Contingency Plan contained in 40 CFR 300. Phases of the process are described below.

The Preliminary Assessment (PA) is the first step of the CERCLA process. The PA relies on historical records, and personnel interviews, and visual inspection of the site to:

- ! eliminate from further consideration those sites which pose no threat to human health or the environment,
- ! determine if there is a potential need for removal action, and
- ! set priorities for site inspections.

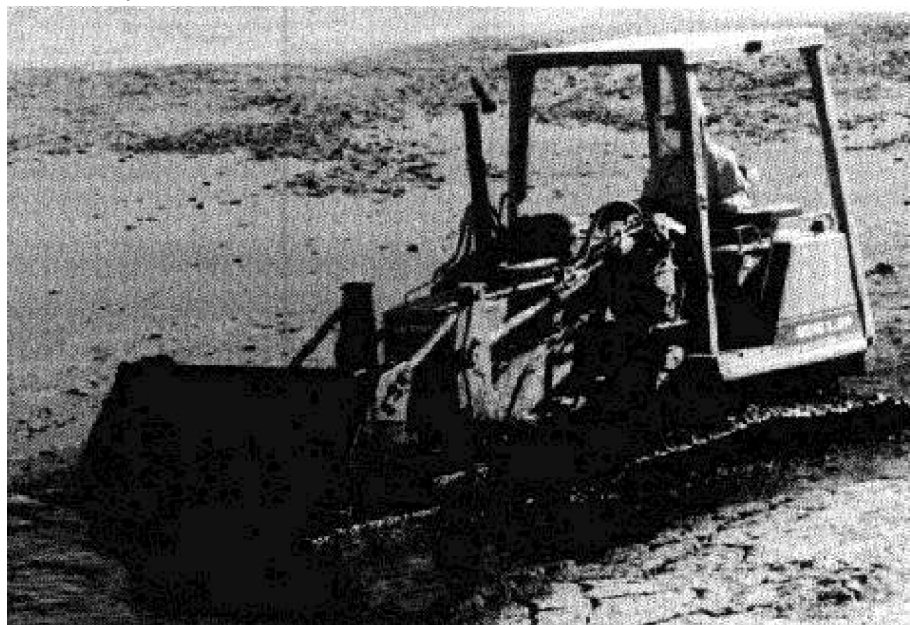
The PA is followed by the Site Inspection (SI). The SI builds upon the information collected in the PA and involves field sampling to confirm the presence or absence of contamination to:

- ! eliminate from further consideration those releases that pose no significant threat to public health or the environment,
- ! determine the potential need for removal action, and
- ! collect or develop data for the hazard ranking system which is used to prioritize sites.

The SI report must include:

- ! a description of the waste handling history of the site,
- ! a description of known contaminants,
- ! a description of pathways of migration of contaminants,
- ! a description of exposure targets, and
- ! A recommendation on whether further action is required.

If the SI recommends further action, the next step in the CERCLA process is the Remedial Investigation I Feasibility Study (RI/FS). Whereas the SI confirmed the presence of contamination, the RI more fully characterizes the nature and extent of contamination.



This phase:

- ! conducts additional field sampling;
- ! assesses risks posed by contaminants;
- ! documents Applicable or Relevant and Appropriate Requirements (ARARs) identified by lead and support agencies;
- ! evaluates alternative remedies, including the "no action" alternative; and
- ! forms the basis for selection of the final remedy.

The selected remedy is documented in a "Record of Decision (ROD) and the Remedial Design/Remedial Action (RD/RA) phase begins. During this phase, the remedial action is designed and constructed.

In addition to the steps described above, the NCP allows Removal Actions (RAs) to be conducted at any point in the process to prevent, minimize, stabilize, mitigate, or eliminate the threat to public health or welfare or the environment. The removal actions can be interim remedial measures or may constitute final remedies, but are generally limited to actions which can be accomplished in under 12 months and for less than \$2,000,000.



### **Clean Water Act (CWA)**

The Clean Water Act was enacted as a means to restore and maintain the chemical, physical, and biological integrity of the nations' waters. This is primarily accomplished through the National Pollutant Discharge Elimination System (NPDES) Program and the Section 404 Permit Program.

As a district/division commander you should be aware that:

- ! NPDES permits are required for point source discharges to surface waters from industrial operations and sewage treatment operations. These permits establish concentration limits on pollutants being discharged and specify monitoring, reporting, and

non-compliance notification requirements. Remediation projects in which treated ground water is discharged to a stream would be an example of a Corps project that would be impacted by the CWA. This activity would be required to meet substantive requirements of the Clean Water Act such as restrictions on concentration of pollutants discharge, and unless exempted under SARA, would also need an NPDES permit.

- ! NPDES permits are required for storm water discharges associated with industrial activity; construction operations disturbing five acres or more; hazardous waste treatment, storage, and disposal activities; transportation facilities; recycling activities; and sewage treatment activities. Storm water permits can be in the form of an individual permit, group permit, or general permit.
- ! Facilities required to obtain NPDES storm water discharge permits are required to develop and implement Pollution Prevention Plans.
- ! Section 404 permits are required for any discharge of dredged or fill material into waters or wetlands.

### **Clean Air Act (CAA)**

The Clean Air Act was enacted to protect and enhance the quality of the nation's air resources in order to protect and maintain the public health and welfare. Through the Clean Air Act National Ambient Air Quality Standards (NAAQS) were established for six criteria pollutants carbon monoxide, sulfur dioxide, nitrogen dioxide, ozone, particulates and lead. Monitoring data for these pollutants are used to measure the air quality around the country. In areas that meet the NAAQSs, "Prevention of Significant Deterioration" programs are required to maintain air quality standards. In non-attainment areas, programs are required to reduce air pollutants to meet NAAQSs. To control air emissions, notification and permitting programs have been instituted which evaluate and monitor air pollution activities.

In addition to establishing NAAQSs, the CAA also regulates toxic air pollutants. There are specific regulations on a limited number of toxics such as asbestos, mercury, and vinyl chloride. However, under the new CAA of 1990, regulations for an extensive list of toxic chemicals are to be developed.

Another important provision of the new CAA which may significantly impact the Corps is stratospheric ozone protection. This requires the phasing out of the manufacturing and use of chlorofluorocarbons (CFCs). The Corps uses CFCs in a number of areas including air conditioning equipment, refrigeration equipment, and laboratories.

As a division/district commander you should be aware that:

- ! Equipment which either increases or decreased air emissions may require permits from the local air pollution authority, but requirements vary depending upon location. Typical examples of types of equipment that may require permits include air stripping operations, vapor recovery systems, abrasive blasting operations and baghouses, and tank purging operations.

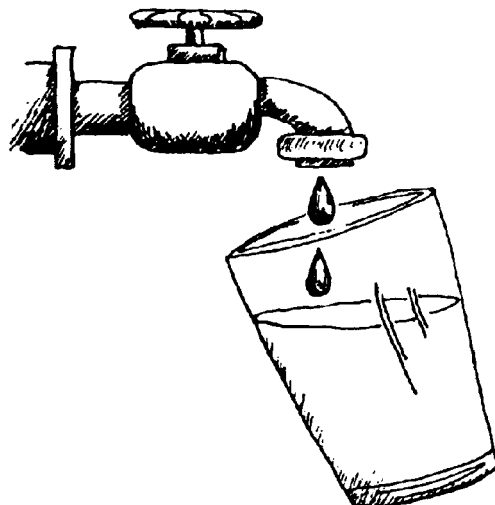
- ! Air pollution control authorities may regulate action specific activities involving air emissions as well as equipment related activities. For example, activities such as excavations of contaminated soil which result in releases of volatile organic compounds may be required to be monitored and vapor control measures may be required to be taken if emissions exceed a particular level.
- ! Asbestos removal activities may require notifications to the local air pollution control authority.
- ! Maintenance of air conditioning units must be conducted by certified technicians training in recovering CFCs.

### **The Safe Drinking Water Act (SDWA)**

The Safe Drinking Water Act was enacted to ensure the quality of the nations drinking water. Water quality standards have been established to achieve this goal. Primary drinking water standards, are either maximum contaminant levels (MCLs) that must be attained or specific treatment technologies that must be applied. Secondary drinking water standards are aesthetic standards such as color and odor which are a measure of water quality, but are not enforceable standards. Whereas water exceeding primary drinking water standards can not be distributed for consumption, water exceeding secondary drinking water standards can be distributed. In addition to establishing primary and secondary standards, EPA also promulgates maximum contaminant level goals (MCLGs). These are risk-based goals toward which water quality is aimed, but attainment is not mandatory.

As a division/district commander you should know that:

- ! Water purveyors are required to have programs in place to monitor water quality to ensure compliance with MCLs.
- ! MCLs are frequently identified as applicable or relevant and appropriate requirements (ARARs) for ground water remediation projects.
- ! MCLGs are frequently identified as relevant and appropriate for ground water remediation projects.





## **National Environmental Policy Act (NEPA)**

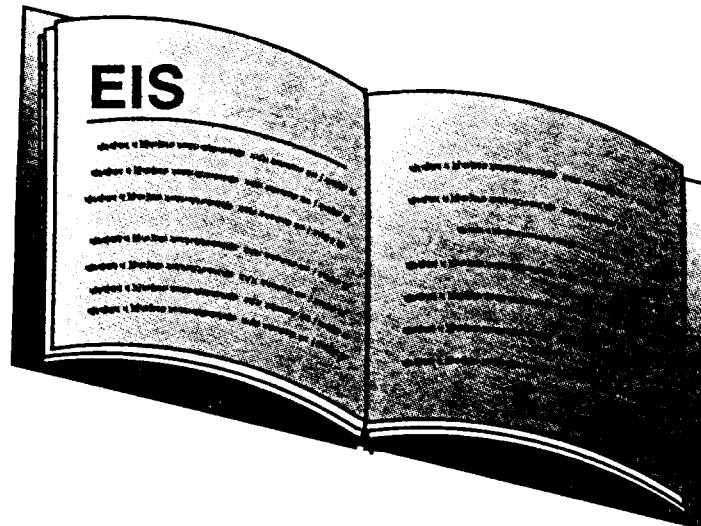
The National Environmental Policy Act was established to ensure Federal activities safeguard against environmental degradation. Federal agencies are required to include NEPA in their planning process.

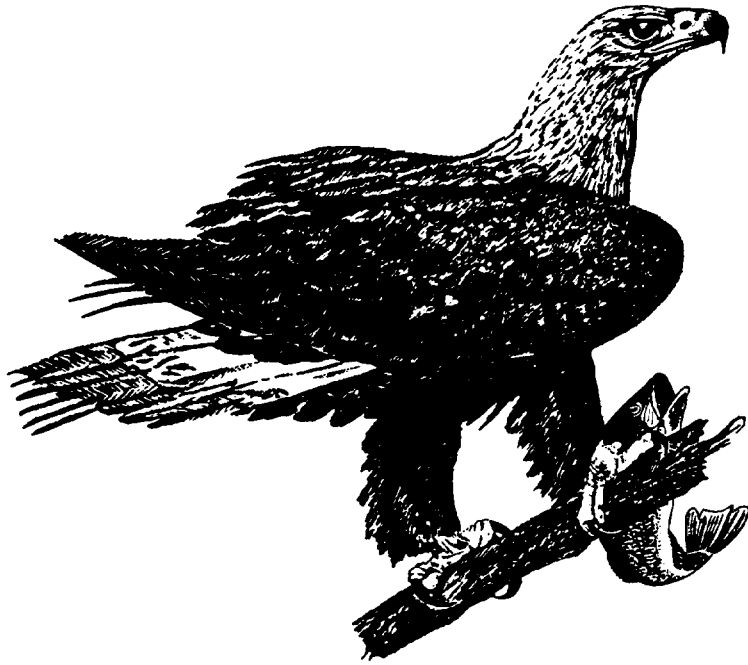
As a division/district commander, you should know that:

- ! Army procedures for implementing NEPA are contained in AR-200-2.
- ! The AR lists categorical exclusions for actions which are considered to have no significant environmental impact.
- ! If an action is not covered by a categorical exclusion, an environmental assessment is completed which either concludes with a "finding of no significant impact (FONSI)" or requires preparation of an Environmental Impact Statement (EIS).

Documents are to address:

- ! the environmental impacts of the proposed action, including any unavoidable adverse impacts,
- ! any irreversible or irretrievable commitments of environmental resources which would occur as a result of the proposed action,
- ! conflicts and trade-offs between short-term environmental uses and long-term environmental productivity, and
- ! reasonable alternatives to the proposed action.





### **Endangered Species Act (ESA)**

The Endangered Species Act serves to protect species threatened with extinction.

As a district/division commander, you should know that the Endangered Species Act requires any discretionary action authorized, funded, or carried out by the Corps of Engineers to:

- ! determine whether actions will impact listed species,
- ! ensure actions undertaken will not likely jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat,
- ! consult with the Fish and Wildlife Service regarding effects on terrestrial species and with National Marine Fisheries Service for effects on marine species when a proposed action has a potential to impact any listed or proposed species or critical habitat, and
- ! conduct a biological assessment if a listed species is present to determine whether or not any listed species or critical habitat is likely to be adversely affected by the proposed action.

### **Federal Facilities Compliance Act (FFCA)**

The Federal Facilities Compliance Act of 1992, P.L. 102-386, amended the Solid Waste Disposal Act to clarify provisions concerning the application of certain requirements and sanctions to Federal facilities.

As a division/district commander, you should know that as a result of the FFCA:

- ! The United States has waived any immunity otherwise applicable with respect to any substantive or procedural requirement of the Solid Waste Disposal Act.

- ! Federal facilities are now subject to administrative orders, civil and administrative penalties and fines.
- ! No Federal employee, or officer of the U.S. shall be personally liable for any civil penalty under any Federal, state, interstate, or local solid or hazardous waste law with respect to any act or omission within the scope of the official duties of the agent, employee, or officer.
- ! The Act does not provide Federal employee protection for criminal penalties or fines.
- ! Federal facilities are subject to reasonable service charges for fees assessed in connection with the processing and issuance of permits, renewal of permits, amendments to permits, review of plans, studies, and other documents, and inspection and monitoring of facilities, as well as any other nondiscriminatory charges that are assessed in connection with a Federal, state, interstate, or local solid waste or hazardous waste regulatory program.

